

What is claimed is:

1. A solid-state image-sensing device comprising:

a first pixel including a photoelectric conversion element and capable of generating an output signal that is logarithmically proportional to an amount of light incident on the photoelectric conversion element;

a second pixel for generating as an output signal a compensation signal with which to compensate the output signal of the first pixel; and

a reading circuit for reading out the output signals of the first and second pixels.

2. A solid-state image-sensing device as claimed in claim 1,

wherein the solid-state image-sensing device has a plurality of first pixels.

3. A solid-state image-sensing device as claimed in claim 2,

wherein the solid-state image-sensing device has a plurality of second pixels.

4. A solid-state image-sensing device as claimed in claim 3,

wherein the first pixels are arranged in a two-dimensional array, and the second pixels are arranged in a line in such a way as to correspond one to one to columns of the first pixels.

5. A solid-state image-sensing device as claimed in claim 4, further comprising:

a plurality of output signal lines provided one for each column of pixels, the output signal lines each permitting the output signals of the first and second pixels arranged in an identical column to be extracted therethrough.

6. A solid-state image-sensing device as claimed in claim 1,
wherein the second pixel is smaller in size than the first pixel.

7. A solid-state image-sensing device as claimed in claim 1,
wherein the first and second pixels have different circuit configurations.

8. A solid-state image-sensing device as claimed in claim 7,
wherein, whereas the first pixel includes the photoelectric conversion element, the
second pixel includes no photoelectric conversion element.

9. A solid-state image-sensing device as claimed in claim 1,
wherein the first and second pixels have an identical circuit configuration.

10. A solid-state image-sensing device as claimed in claim 9,
wherein the first and second pixels receive different voltages.

11. A solid-state image-sensing device as claimed in claim 1,
wherein the first and second pixels each include a plurality of MOS transistors.

12. A solid-state image-sensing device as claimed in claim 1,
wherein the first pixel generates selectively either the output signal that is
logarithmically proportional to the amount of incident light or an output signal that is linearly
proportional to the amount of incident light.

13. A solid-state image-sensing device as claimed in claim 1, further comprising:
a compensation circuit for compensating the output signal of the first pixel with the output signal of the second pixel.

14. A solid-state image-sensing device as claimed in claim 13,
wherein the compensation circuit includes a storage circuit for storing the output signal of the second pixel and a differential amplifier circuit for outputting a difference between the output signal of the first pixel and the output signal of the second pixel stored in the storage circuit.

15. A solid-state image-sensing device comprising:
a first pixel including a photoelectric conversion element and capable of generating selectively either an output signal that is logarithmically proportional to an amount of light incident on the photoelectric conversion element or an output signal that is linearly proportional to the amount of light incident on the photoelectric conversion element;
a second pixel for generating as an output signal a compensation signal with which to compensate the output signal of the first pixel; and
a reading circuit for reading out the output signals of the first and second pixels.